Poa laxa ssp. fernaldiana

Status

Federal status: G5?T3 N2N3, Not listed
NH state status: S2S3, Endangered
ME state status: S1, Endangered

NEPCoP Division 1, globally rare taxa occurring in New England. This species is never abundant, and it is threatened across its range by recreational use of habitat, but actual population trends are unknown.

The expert panel indicated that the outcome for *Poa laxa* ssp. *fernaldiana* on the WMNF is currently B. It seems to be doing reasonably well. The panel said that construction of the huts and facilities at the summit (assumed to Mt. Washington summit) apparently did not substantially affect the populations there, though it is difficult to determine the extent of the populations in the past to be sure. This is in contrast with NHNHI information that documents all occurrences away from Franconia Ridge as historic, but with little evidence of recent surveys. The long-term outcome is probably also B, as there is nothing to indicate otherwise.

Distribution

This species is found in Newfoundland and Quebec south to the alpine summits of Maine, New Hampshire, Vermont, and New York. The majority of the global population is in eastern Quebec. Northern New England is at the southern limit of its range.

In New Hampshire, the only known extant occurrences are in Franconia, all on the WMNF. Historic occurrences are known from: Sargents Purchase, 4 historic occurrences; Thompson and Meserve, 3 historic occurrences; Low and Burbanks (2), Randolph (1), Franconia (1), and Hart's Location (1). All of these but the Hart's location occurrence were on the WMNF.

In Maine it is known from Piscataquis and Washington Counties, neither of which include land on the WMNF.

Habitat

Poa laxa ssp. *fernaldiana* is typically found on wet cliffs, especially on the little underhangs of the cliffs. It can also be found in patches of the dry/mesic heath meadow system of alpine communities in NH. This species is often found in areas that are wet due to fog. It typically does not have much else growing around it.

The dry/mesic heath meadow system is associated with unconsolidated gravel-stony soils and convex landforms that are more exposed. It forms a large and widespread patch matrix in the Presidentials. Lesser summits have these systems in small patches. Habitat features that are important in providing viability of the dry/mesic heath meadow system include those factors associated with exposure to the elements, especially in winter. The key factors are cold, wind, and snow and ice blast. Other factors include dry to mesic moisture conditions, well-drained sites, thin acidic soils, and dessication and low nutrient tolerant plants.

Limiting Factors

Human disturbance is the primary threat to the dry/mesic heath meadow system. Hiker pressures to the system include direct trampling along trails and in areas without trails, typically ridges and peaks, where hikers go "view seeking". *Poa laxa* ssp. *fernaldiana* is threatened across its range by recreational use of habitat.

Global warming and acid deposition may threaten *Poa laxa* ssp. *fernaldiana* and the dry/mesic heath meadow system, though the threat from these factors is likely minor compared to other factors such as hiker pressures.

Viability concern

The taxonomic rank of T3, national rank of N2N3, and documentation on the WMNF make it an automatic Regional Forester sensitive species for the Forest. The WMNF provides a major portion of this species' habitat in New England and almost 100% of the habitat within New Hampshire. The WMNF is important to *Poa laxa* ssp. *fernaldiana* as all known extant populations are on the Forest.

Management activities that might affect populations or viability

The activity with potential to impact this species that the WMNF has some control over is trampling by hikers and other recreationists. Management that would reduce the density of trails in the alpine zone, help keep hikers on designated trails, and protect rare species from rock and ice climbing impacts would reduce the potential for trampling.

Trail construction or other development in the alpine zone could affect this species if it would directly impact wet cliff habitat, alter the hydrology of a suitable area, or increase human traffic near suitable habitat. Trail maintenance activities could alter habitat suitability or directly impact individuals.

References

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